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A new species of *Tiphodytes* (Hymenoptera, Platygastroidea, Scelionidae) from Sulawesi, Indonesia¹

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Abstract: A new species of *Tiphodytes* (Hymenoptera, Platygastroidea: Scelionidae) is described from Sulawesi, Indonesia, based on a male specimen which was collected in a Malaise trap over a small stream. The taxon is named after Professor Dr. Hans Malicky in recognition of his great contribution towards our knowledge of the insect fauna of south-east Asia including Sulawesi.

Key words: new species, Sulawesi, Indonesia, Hymenoptera, Scelionidae, *Tiphodytes*.

Introduction

The aquatic hymenopteran *Limnodytes gerriphagus* was described by MARCHAL (1900) from France. However the generic name had been previously used for a genus of Amphibia and as a result, *Limnodytes* was replaced by its junior synonym *Tiphodytes* BRADLEY 1902. The data on the biology of *Tiphodytes* still refer exclusively to that of *T. gerriphagus*. The species is an egg-parasitoid and the hosts include the waterstriders *Gerris*, *Limnoporus* and *Trepobates* spp. (Hemiptera, Gerridae). Adults of *Tiphodytes* have been observed swimming quickly and strongly in the water (HIRASHIMA et al. 1999). Species belonging to the genus have sclerotisation on the wing margins presumably to assist them while swimming in aquatic habitats.

Tiphodytes malickyi nov.sp.

In describing the new species, the following points should be noted. Descriptions of the males of three species of *Tiphodytes* have been published viz. *T. gerriphagus* (MARCHAL 1900), *T. godavari* MASNER 1972 and *T. robertae* MINEO 1993. The male of *T. gerriphagus* has been reared with females from the eggs of *Gerris* sp. while that of *T. robertae* was associated with the female. The unique feature of a stigmalis with a large knob will separate *T. malickyi* nov.sp. from all other known species of *Tiphodytes*. In addition, *T. malickyi* nov.sp. is readily separated from the males of the three species mentioned above by the length of the cilia on the hind margin of the forewing, the greyish eyes and the unsculptured T3. In *T. gerriphagus*, the cilia are distinctly shorter than the maximum width of the forewing and the eyes are black. In *T. godavari*, the longest cilia are only as long as one third the maximum width of the forewing

¹ This paper is dedicated to Prof. Dr. Hans Malicky on the occasion of his 75th birthday.

and the measurements of the male antennal segments are different (MASNER 1972). In *T. robertae*, T3 is sculptured (MINEO 1993).

D i a g n o s i s . T2 a little longer than T3 (4 length x 8 width: 3.5 length x 9 width). A6-A11 more or less knotted with whorls of setae longer than the relative length of each flagellomere. The genae are a little wider than the temples, both weakly swollen. Longest fringe on the fore and hind margins of the forewing more or less equal to the maximum width (6 : 6) while the longest cilia of the hind margin of the hindwing are approx. three times longer than the maximum width (6.3 : 2.1). The vertex in side view forms a subacute angle with the occiput.

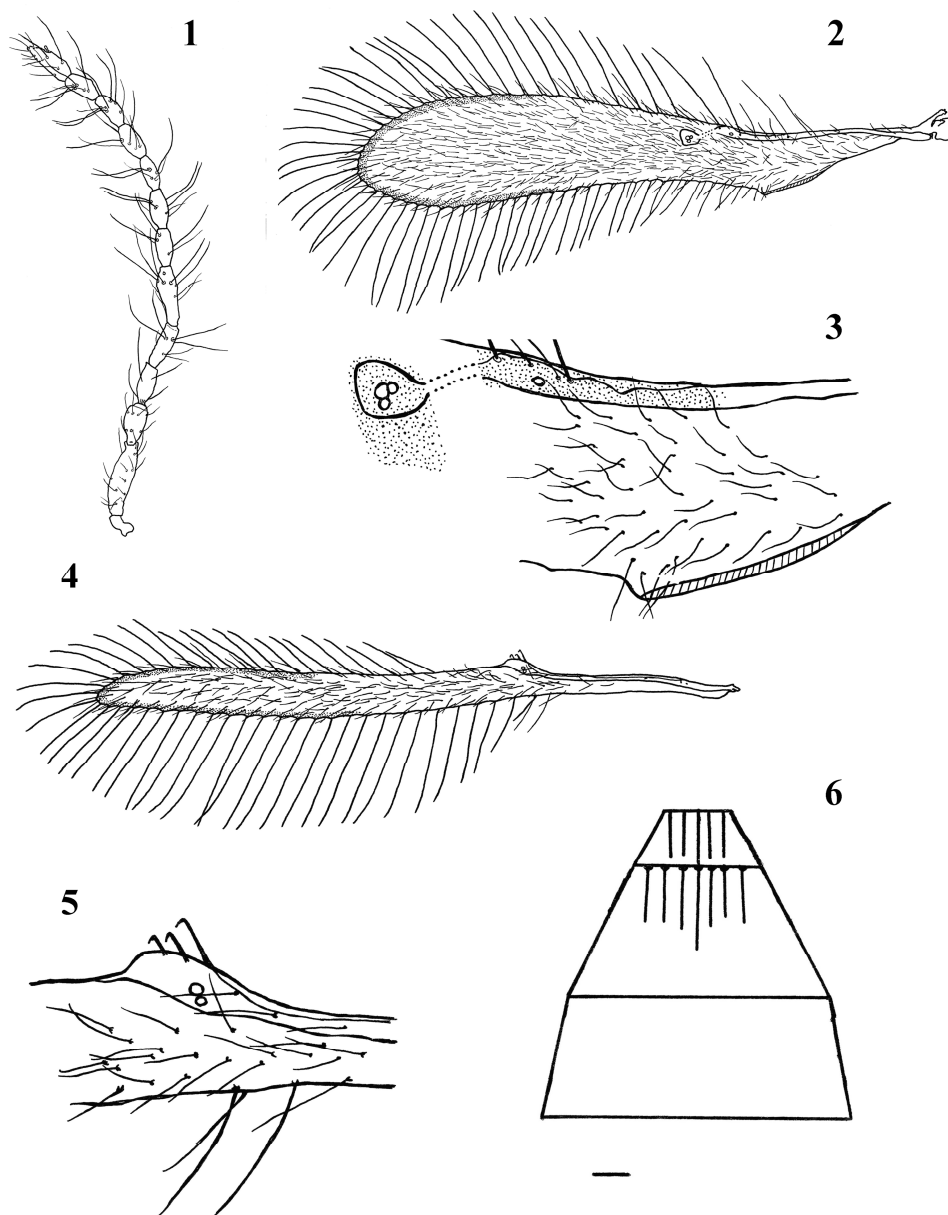


Fig. 1-6: (1) Antenna of male *Tiphodytes malickyi* nov.sp.; (2) Forewing of male *Tiphodytes malickyi* nov.sp.; (3) Detail of forewing of male *Tiphodytes malickyi* nov.sp.; (4) Hindwing of male *Tiphodytes malickyi* nov.sp.; (5) Detail of hindwing of male *Tiphodytes malickyi* nov.sp.; (6) Tergites 1-3 of male *Tiphodytes malickyi* nov.sp. (scale bar = 1/45mm. Measurements were made at 40 x 20 with a Wild M20 Stereomicroscope).

Description. Length 0.6mm. Head transverse (4 length x 10 width); interorbital space = 4.5; eye height = 7 x 3.8 width. Mesosoma from above 10 width x 10 length; metasoma forewing length ratio as 12 : 39. Antenna and wings, see Fig. 1-5. Margins of both wings partly additionally sclerotised as usual in other *Tiphodytes* spp. Head quite hemispherical, smooth all over and with a few very long decumbent setae; eyes greyish and glabrous. Mesoscutum rather convex like the scutellum, both smooth and with scattered long setation as on the head; notaulices visible posteriorly as shallow depressions, very short. Six long and greyish setae, rather decumbent at the apices, arise from the dorsellum. For proportions and striations of T1 and T2 see Fig. 6. T3 smooth and shiny like the subsequent tergites.

Material examined. 1 ♂ (Holotype). **Indonesia**, Sulawesi, Danau Mala, 0°45'N, 124°29'E, 2-5 October 1985, Malaise trap over small stream above PPA hut (Patrick Ashe) (National Museum of Ireland).

Etymology. The species is named in honour of Professor Dr. Hans Malicky in recognition of his great contribution towards our knowledge of the insect fauna of south-east Asia including Sulawesi.

Female, host and biology. Not known.

Zusammenfassung

Eine neue Art (*Tiphodytes malickyi*: Hymenoptera, Platygastridae, Scelionidae) wird nach einem in einer Malaisefalle über einem kleinen Bach in Sulawesi gefangenen Männchen beschrieben. Die Art ist nach Prof. Hans Malicky in Anerkennung seiner Beiträge zur Kenntnis der Insektenfauna Südostasiens, inklusive Sulawesi, benannt.

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